

***Amendments to the Claims:***

This listing of the claims replaces all prior versions of the claims in the application:

**Listing of the Claims:**

1. (currently amended) A method for transplanting one or more deposits of about 500,000 cells grown as neurospheres, which contain ~~transplantation of at least about  $1 \times 10^6$~~  mitogenic growth factor-responsive neural stem cells capable of differentiating into neurons, oligodendrocytes, or astrocytes, the method comprising
  - (a) administering said ~~neural stem~~ cells to a first area of the brain of ~~a living host~~ subject, ~~said first area comprising multiple loci for receiving an aliquot of the neural stem cells;~~ and
  - (b) infusing a mitogenic growth factor at a second area of the brain of said host subject,wherein the transplanted neural stem cells retain their responsiveness to the mitogenic growth factor *in vivo* and migrate from the first area toward the second area, and wherein the neural stem cells are capable of differentiating into a cell selected from the group consisting of neurons, astrocytes, ~~or~~ and oligodendrocytes following migration to the second area.
2. (previously presented) The method of claim 1, wherein said neural stem cells are mammalian embryonic neural stem cells.
3. (previously presented) The method of claim 1, wherein said first area is in the striatum of the brain and wherein said second area is in the lateral ventricle of the brain.
- 4-5. (canceled)
6. (previously presented) The method of claim 1, wherein said neural stem cells are cultured in media comprising the mitogenic growth factor prior to transplantation.

7-12. (canceled)

13. (previously presented) The method of claim 6, wherein said culture is a suspension culture.

14. (previously presented) The method of claim 6, wherein said culture is an adherent culture.